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[54] METHOD AND APPARATUS FOR

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| [54] | POWERING-ON A COMPUTER-BASED |
|------|--------------------------------|
| | SYSTEM VIA A NETWORK INTERFACE |

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[21] Appl. No.: 09/152,634

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|------|---------------------|-------------------------|
| [51] | Int. Cl.6 | G06F 1/26 |
| [52] | U.S. Cl | 713/310; 713/300 |
| [58] | Field of Search | . 395/750.01-750.08, |
| | | 395/750 |

[56] References Cited

U.S. PATENT DOCUMENTS

| 4,635,195 1/1987 | Jeppesen, II et al 395/750 |
|------------------|----------------------------|
| | Sharp et al 395/750 |
| | Sharp et al |
| 4,677,566 6/1987 | Whittaker et al 395/750 |
| 4,747,041 5/1988 | Engel et al 395/750 |
| 5,012,233 4/1991 | Paulsen, Jr 395/750 |

| 5,121,500 | 6/1992 | Arlington et al | 395/750 |
|-----------|--------|-----------------|---------|
| 5,121,506 | 6/1992 | Arlington et al | 395/750 |
| 5,381,414 | 1/1995 | Gibson | 395/750 |
| 5,396,636 | 3/1995 | Gallagher et al | 395/750 |
| 5,535,400 | 7/1996 | Belmont | 395/750 |

FOREIGN PATENT DOCUMENTS

| TORESON THE TO DOCUM | | | |
|----------------------|--------|---------|------------|
| 92302925 | 4/1992 | Europea | n Pat. Off |
| 92305570 | 6/1992 | Europea | n Pat. Off |

93304075 5/1993 European Pat. Off. .

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7] ABSTRACT

A network interface card in a networked client computer includes a network interface circuit that decodes and the compares incoming network packet addresses to known address bit patterns, the decoding and comparing circuitry being powered at all times. Receipt and recognition of certain addresses means the client computer must be powered-on, even if manually switched OFE. When such a server-transmitted address is recognized, a power-on signal is issued to a power control unit that causes full operating power to be coupled to the client computer. In this fashion, a server can broadcast power-on signals to a plurality of networked client computers ovofssations.

20 Claims, 3 Drawing Sheets

